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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/828,424	04/20/2004	Jerry M. Edmondson	INDIVIDUAL	5343
7590 12/21/2005			EXAMINER	
JERRY M. EDMONDSON 2 ESCAPADE CT NEWPORT BEACH, CA 92663			SAVAGE, MATTHEW O	
			ART UNIT	PAPER NUMBER
			1724	

DATE MAILED: 12/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/828,424

Applicant(s)

EDMONDSON, JERRY M.

Examiner

Matthew O. Savage

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

The drawings are objected to because reference number "2a" mentioned on the second line of the second paragraph of page 6 of the specification has not been shown. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "means for imparting an electric field" recited in claims 6 and 13 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The disclosure is objected to because of the following informalities: reference number --5-- should be inserted after "firetube" on the second line of the third paragraph of page 6 of the specification

Appropriate correction is required.

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

The term “indicator” appearing in claims 3, 9, and 11, fails to appear in the specification. It is suggested that “indicator” be changed to –handle—having basis on line 9 of the third paragraph of page 7 of the specification.

The disclosure is objected to because of the following informalities:

on line 2 of claims 1 and 12, “An” should be changed to –an--.

Appropriate correction is required.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Concerning claims 1, 3, 4, 6, 7, 9, 10-13, and 15, it is uncertain as to what structure the “means” imply since the structure corresponding with each means has not been adequately defined in the specification.

Concerning claims 6 and part d. of claim 10, the means for creating the electric field has not been adequately disclosed in the specification. In addition, the specification fails to adequately disclose how to produce an electric field that is transverse to the permeable barrier as recited in part e. of claim 10.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term “energy efficient” used in the preamble of independent claims 1, 10, and 12 is considered subjective, and therefore, considered vague and indefinite.

Claims 1, 10, and 12 are considered indefinite since the location of each element in relation to the other elements has not been clearly specified.

With respect to lines 6-8 of claim 1, “the flow path of both the oil and water”, “the flow path of the oil”, and “the flow path of the water” lack antecedent basis. In addition, the location of each flow path is unclear. Furthermore, it is unclear as to whether each flow path is located in the same area of the separator or in different areas.

Concerning claims 1, 3, 4, 6, 7, 9, 10-13, and 15, it is uncertain as to what structure the “means” imply since the structure corresponding with each means has not been adequately defined in the specification.

Claims 2, 3, 4, 8, 9, part f. of claim 10, 11, 14, 15 include limitations that further structurally define the “means” and are considered redundant of the respective means plus function limitations. It is suggested that either means plus function language or structure plus function language be used consistently throughout the claims.

With respect to claims 7 and 12, it is uncertain as to whether or not the barrier is actually positioned in downward flow path.

Regarding parts b. and c. of claim 10, “the flow path of the oil and water” and “the flow paths of the oil and water” lack antecedent basis. In addition, it is unclear as to whether or not the flow paths occupy the same area in the tank or different areas. Furthermore, the location of each flow path is unclear. Concerning part c., it is unclear as to how the “electric field” is created or how the oil is caused to flow in a downward direction since no means or structure for creating the electric field has been recited in the claim. As to part e., it is uncertain as to how the permeability of the barrier is regulated since no means or function for accomplishing the function has been recited in the claim. In addition, the orientation of the barrier is unclear since the orientation of the electric field has not been specified and it is unclear as to whether or not the barrier is actually positioned in the electric field.

On line 7, “the downward flow path” lacks antecedent basis.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,827,865 to Fenwick.

With respect to claim 1, Fenwick discloses an enclosed containment vessel 12 (see FIG. 1a), an inlet conduit 26, an outlet conduit 50 (see FIG. 1b), a water outlet conduit 52, at least one permeable baffle 30, a permeable barrier 32 placed in the flow path of the oil, means for regulating the permeability of the barrier (see FIG. 4a or 4b), an additional barrier 34, and means for regulating the permeability of the additional barrier (see FIG. 4A or 4B).

As to claim 2, Fenwick discloses the permeable barriers as being in the form of a louvered shutter type construction such that the louvers are rotatable (see FIG. 4A).

Concerning claim 5, Fenwick discloses structure 16 capable of causing oil to flow in a generally downward flow path (see FIG. 1A).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.



Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,827,865 to Fenwick in view of U.S. Patent 6,315,898 to Bull.

With respect to claim 3, Fenwick fails to specify exterior means for rotating the louvers in the form of an indicator of the angular position of the louvers. Bull discloses an exterior means 85 (see FIG. 7) for rotating louvers 70 capable of functioning as an indicator and suggests that such a means enables to angular position of the louvers to be adjusted from a position outlet the vessel. It would have been obvious to have modified the apparatus of Fenwick so as to have included the exterior means as suggested by Bull in order to enable angular adjustment of the louvers from a position outside the vessel.

Claims 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,827,865 to Fenwick in view of U.S. Patent 5,865,992 to Edmondson.

With respect to claim 4, Fenwick discloses heating means 18 of a U shape with a burner on one end an exhaust stack 22 on the other, but fail to specify a multi tube section. Edmondson discloses a multi-tube section 13a on a heating means 13 and suggests that such an arrangement improves heat transfer of the heater. It would have been obvious to have modified the apparatus of Fenwick so as to have included a multi-tube section as suggested by Edmondson in order to improve the heat transfer of the heater.

With respect to claim 6, Fenwick fails to specify a means for imparting an electric field within the downward flow path of the oil. Edmondson discloses a means 11, 12 for

imparting an electric field within the downward flow path of the oil and suggests that such an arrangement increases the rate of separation of water from the oil. It would have been obvious to have modified the apparatus of Fenwick so as to have included the means for imparting an electric field as suggested by Edmondson in order to increase the rate of separation of water from the oil.

Claims 7-9 would be allowable if amended to overcome the 112 rejections and rewritten in independent form.

Claims 10-15 would be allowable if amended to overcome the 112 rejections.

The prior art fails to teach or suggest a horizontally positioned barrier transverse to the downward flow path of the oil, the barrier including a means for discretely regulating its permeability as recited in claims 7 and 12.

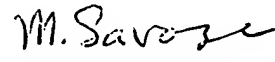
The prior art fails to teach or suggest the limitation of a horizontally positioned permeable barrier transverse to the electric field on which the permeability can be regulated as recited in claim 10.

It is noted further that the prior art fails to disclose the adjustable permeable barrier arrangement shown in section "CC" of FIG. 1.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew O. Savage whose telephone number is (571) 272-1146. The examiner can normally be reached on Monday-Friday, 7:00am-3:30pm.

  
Matthew O Savage  
Primary Examiner  
Art Unit 1724

mos  
December 19, 2005